

LISTING OF THE CLAIMS

Please AMEND claims 1 and 26 as follows:

1. (Currently Amended) An energy beam guide, comprising:

a first region having a first refractive index, said first region having an energy beam receiving end and an ~~inclined~~ first boundary opposing said energy beam receiving end;

a second region having a second refractive index that is less than said first refractive index, said second region sharing said first boundary with said first region, and having a ~~declined~~ second boundary opposing said first boundary, where a predetermined distance separates said first and second boundaries; and

a third region having a third refractive index, said third region sharing said second boundary with said second region;

wherein said first boundary slopes upward and away from said energy beam receiving end, and said second boundary slopes downward and away from said energy beam receiving end.

2. (Original) The energy beam guide of claim 1, wherein said second refractive index is larger than said third refractive index.

3. (Original) The energy beam guide of claim 1, wherein said second refractive index is less than said third refractive index.

4. (Original) The energy beam guide of claim 1, wherein said energy beam guide forms part of a detection cell of an electrophoresis system.

5. (Original) The energy beam guide of claim 4, wherein said third region defines a detection portion of said detection cell.
6. (Original) The energy beam guide of claim 1, further comprising an excitation source and a detector.
7. (Original) The energy beam guide of claim 1, wherein said first refractive index is in a range from 1.47 to 1.61.
8. (Original) The energy beam guide of claim 1, wherein said second refractive index is in a range from 1.46 to 1.52.
9. (Original) The energy beam guide of claim 1, wherein said second refractive index is 1.52.
10. (Original) The energy beam guide of claim 1, wherein said second refractive index is 1.472.
11. (Original) The energy beam guide of claim 1, wherein said third refractive index is in a range from 1.33 to 1.46.
12. (Original) The energy beam guide of claim 1, wherein said third refractive index is 1.41.
13. (Original) The energy beam guide of claim 1, wherein said first region is an optical adhesive.
14. (Original) The energy beam guide of claim 1, wherein said first region is a liquid index matching fluid.

15. (Original) The energy beam guide of claim 1, wherein said second region is selected from a group consisting of glass and plastic.
16. (Original) The energy beam guide of claim 1, wherein said third region is a migration medium.
17. (Original) The energy beam guide of claim 16, wherein said migration medium is a polymer.
18. (Original) The energy beam guide of claim 1, wherein said inclined first boundary presents a concave shape to said energy beam.
19. (Original) The energy beam guide of claim 1, wherein said declined second boundary presents a convex shape to said energy beam.
20. (Original) The energy beam guide of claim 1, wherein said energy beam is refracted at said first and second boundaries.
21. (Original) The energy beam guide of claim 20, wherein an angle of refraction is greater than the angle of incidence at both said first and second boundaries.
22. (Original) The energy beam guide of claim 1, wherein a shortest distance separating said first region from said second region is in a range from 0.1 to 1000 microns.
23. (Original) The energy beam guide of claim 1, further comprising an optical element disposed between an energy beam source and said energy beam guide.
24. (Original) The energy beam guide of claim 23, wherein an energy beam receiving end of said optical element is sloped.

25. (Original) The energy beam guide of claim 23, wherein said optical element is formed from a substance that comprises said first region.

26. (Currently Amended) An energy beam guide, comprising:

a first region having a first refractive index;

a second region sharing an ~~inclined~~ first boundary with said first region, said second region having a second refractive index that is less than said first refractive index; and

a third region sharing a ~~declined~~ second boundary with said second region, said third region having a third refractive index, where a predetermined distance separates said first and second boundaries;

wherein said first boundary slopes upward and away from said energy beam receiving end, and said second boundary slopes downward and away from said energy beam receiving end.

27. (Original) The energy beam guide of claim 26, wherein said second refractive index is larger than said third refractive index.

28. (Original) The energy beam guide of claim 26, wherein said second refractive index is less than said third refractive index.

29. (Original) The energy beam guide of claim 26, wherein said energy beam guide forms part of a detection cell of an electrophoresis system.

30. (Original) The energy beam guide of claim 29, wherein said third region defines a detection portion of said detection cell.

31. (Original) The energy beam guide of claim 26, further comprising an excitation source and a detector.
32. (Original) The energy beam guide of claim 26, wherein said first refractive index is in a range from 1.47 to 1.61.
33. (Original) The energy beam guide of claim 26, wherein said second refractive index is in a range from 1.46 to 1.52.
34. (Original) The energy beam guide of claim 26, wherein said second refractive index is 1.52.
35. (Original) The energy beam guide of claim 26, wherein said second refractive index is 1.472.
36. (Currently Amended) The energy beam guide of claim 26, wherein said third refractive index is is in a range from 1.33 to 1.46.
37. (Original) The energy beam guide of claim 26, wherein said third refractive index is 1.41.
38. (Original) The energy beam guide of claim 26, wherein said first region is an optical adhesive.
39. (Original) The energy beam guide of claim 26, wherein said first region is a liquid index matching fluid.
40. (Original) The energy beam guide of claim 26, wherein said second region is selected from a group consisting of glass and plastic.

41. (Original) The energy beam guide of claim 26, wherein said third region is a migration medium.
42. (Original) The energy beam guide of claim 41, wherein said migration medium is a polymer.
43. (Original) The energy beam guide of claim 26, wherein said inclined first boundary presents a concave shape to an energy beam.
44. (Original) The energy beam guide of claim 26, wherein said declined second boundary presents a convex shape to an energy beam.
45. (Original) The energy beam guide of claim 26, wherein an energy beam is refracted at said first and second boundaries.
46. (Original) The energy beam guide of claim 45, wherein an angle of refraction is greater than the angle of incidence at both said first and second boundaries.
47. (Original) The energy beam guide of claim 26, wherein a shortest distance separating said first region from said second region is in a range from 0.1 to 1000 microns.
48. (Original) The energy beam guide of claim 26, further comprising an optical element disposed between an energy beam source and said energy beam guide.
49. (Original) The energy beam guide of claim 48, wherein an energy beam receiving end of said optical element is sloped.
50. (Original) The energy beam guide of claim 48, wherein said optical element is formed from a substance that comprises said first region.